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Instability in self-esteem and paranoia in a general population sample

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Abstract *Background* Research on the association between paranoia and self-esteem has yielded inconsistent findings. Some studies have indicated an association between paranoia and low self-esteem, while other studies have shown an association with high self-esteem. A plausible explanation for these inconsistencies is that self-esteem is unstable in paranoid individuals. *Method* The association between instability in self-esteem and paranoia was assessed in a general population risk set of 4636 individuals using logistic regression analysis. *Results* Self-esteem instability was significantly associated with the presence of paranoid symptoms (OR 1.27 95% CI 1.12–1.45) and not with other positive psychotic symptoms (OR 1.09 95% CI 0.96–1.23), adjusted for a range of a priori selected confounders. *Conclusion* The finding of a specific association between unstable self-esteem and paranoia is in line with a recent psychological model suggesting that paranoid beliefs arise partly as a consequence of dysfunctional efforts to regulate self-esteem.

Key words paranoia – population – psychosis – self-esteem

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Introduction

Self-esteem is the focus of much research in contemporary psychology and has become an important focus of study in the context of psychological models of psychosis [1]. It can be described as a favourable or unfavourable attitude toward the self [2]. Low levels of self-esteem have been associated with a number of psychiatric disorders, such as major depression, borderline personality disorder and schizophrenia [3, 4]. Self-esteem has also been hypothesized to play a causal and maintaining role in persecutory delusions [5–7].

Studies, which have investigated the specific association between self-esteem and paranoid delusions show inconsistent results. Whereas low levels of self-esteem have been associated with paranoid ideation, both in patients with psychosis [6, 8] and in non-clinical samples [9–11], a number of other studies demonstrated relatively high or even normal self-esteem in paranoid patients [12, 13]. Candido and Romney [12] assessed global self-esteem in a group of paranoid patients, a group of depressed patients, and a group of patients who were both paranoid and depressed. They demonstrated high self-esteem in the paranoid group, low self-esteem in the depressed group and intermediate scores in the group of patients who were both paranoid and depressed.

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The above mentioned studies illustrate that self-esteem is widely assumed to be a trait, suggesting that self-esteem is either high or low, but essentially stable. Some researchers, however, have suggested that self-esteem may vary dynamically across time [14–17]. The simple distinction of high versus low self-esteem does not sufficiently capture the role of self-esteem in psychological processes. A more valid way of investigating self-esteem, therefore, may be to include not only the level of self-esteem (SE level), but also SE instability. SE level represents the person's general or typical feelings of global self-worth and self-liking, whereas SE instability reflects the magnitude of fluctuations that people experience in their immediate feelings of self-worth [14, 18]. Individuals with unstable self-esteem are found to be more emotionally reactive to everyday events [19], react more strongly to self-esteem threats [20], experience more depression when faced with daily hassles [21], and show problems in psychological functioning [22]. Individuals with high, but highly fluctuating, self-esteem have an excessive tendency to attribute negative experiences to external causes [19]. This last finding is interesting, because this particular attribution style resembles the abnormal style of reasoning about the cause of events in individuals with paranoid delusions [5, 23–27]. It is therefore attractive to hypothesize that SE instability may be associated with paranoid thinking.

Paranoid ideation as well as other psychotic symptoms are not only present in individuals diagnosed with a psychotic disorder but also in a proportion of non-ill individuals from the general population [28]. Psychosis may exist as a continuous trait or phenotype in nature, ranging from "normality" to clinical cases of psychosis [29–31]. Investigating psychosis-like experiences in non-clinical populations may constitute an interesting approach to elucidate psychological mechanisms underlying the psychosis phenotype in large-scale samples [32, 33]. This "cognitive epidemiology" approach may form the foundation of a theoretical framework resulting in more detailed hypotheses that can be investigated in smaller samples. In the current study, a general population sample was investigated at three points in time (baseline, one year later and three years later). If SE instability is truly associated with paranoia, one would expect larger changes in self-esteem in subjects with sub-clinical experiences of paranoia.

Methods

Sample

Data are derived from the Netherlands Mental Health Survey and Incidence study (NEMESIS), a longitudinal study of the prevalence, incidence, course, and consequences of psychiatric disorders in the Dutch general population. Subjects were interviewed on three measurement occasions: in 1996 (T_0), in 1997 (T_1) and in 1999 (T_2). A comprehensive description of the project's objectives, sample procedure, response, diagnostic instruments, quality control procedures and analyses is provided in previous publications [34, 35]. NEMESIS is based on a multi-stage, stratified, random sampling procedure in which 90 Dutch municipalities, a sample of private households within the selected municipalities, and members with the most recent birthday within each household were selected. Subjects were aged between 18–64 years and sufficiently fluent in Dutch to be interviewed. A total of 7076 individuals provided informed consent and were interviewed at T_0 (response rate = 69.7%). At T_1, 5618 subjects participated for the second time; at T_2, 4848 subjects participated for the third time.

CIDI interviews and assessment of symptoms

Subjects were interviewed at home using the Composite International Diagnostic Interview (CIDI), version 1.1 (computerised version) for all three measurements [36, 37]. The CIDI generates DSM-III-R diagnoses. It is designed for trained interviewers who are not clinicians and has been found to have high inter-rater reliability [38] and high test-retest reliability [39, 40]. The CIDI psychosis section (G) consists of 17 core psychosis items on delusions (13 items) and hallucinations (4 items): items G1-G13, G15, G16, G20 and G21. These items concern classic psychotic symptoms, for example persecution, thought interference, auditory hallucinations and passivity phenomena. All these items can be rated in six ways: '1'—no symptom; '2'—symptom present, but not clinically relevant (not bothered by it and not seeking help for it); '3'—symptom is the result of drug use; '4'—symptom is the result of somatic disease; '5'—true psychiatric symptom; '6'—symptom is not really a symptom because there appears to be a plausible explanation for it. At T_0, lifetime prevalence of psychosis was assessed. At T_1 and T_2, new symptoms occurring between T_0 and T_1 and between T_1 and T_2 were assessed.

Paranoid symptoms were narrowly defined as a CIDI rating of five on any of the following four CIDI psychosis items: G1 "Have you ever (since the last interview) been convinced that people were spying on you?", G2 "Has there ever (since the last interview) been a period in which you were convinced that you were persecuted by people?", G3 "Have you ever (since the last interview) been convinced that you were secretly tested on or that experiments were carried out on you?", G4 "Have you ever (since the last interview) been convinced that someone was conspiring against you, wanted to cause you harm or poisoning you?". Paranoid symptom outcome was dichotomously defined as the presence ('1') or absence ('0') of paranoid symptom(s) at T_0 and/or T_1 and/or T_2.

Other positive psychotic symptoms were also narrowly defined as a CIDI rating of 5 on any of the CIDI psychosis items, excluding the four paranoid items. Other positive psychotic symptom outcome was dichotomously defined as the presence ('1') or absence ('0') of symptom(s) at T_0 and/or T_1 and/or T_2.

Assessment of self-esteem

At baseline, T_1 and T_2, subjects were asked to fill in the Rosenberg Self-Esteem Scale (RSE) [2]. The RSE consists of 10 items rated on a 4-point Likert scale (ranging from '1' strongly agree to '4' strongly disagree) and measures overt (explicit) global self-esteem. A high total score indicates high self-esteem. The RSE has demonstrated acceptable consistency and test-retest reliability [41]. The Dutch version of the RSE is considered as one of the best measures of global self-esteem [42] and has a high internal reliability ($\alpha = 0.87$) [43]. Guided by previous research in the field [15, 16, 18], SE instability was defined for each participant as the standard deviation of total scores across the three self-esteem assessments.

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Statistical analysis

In order to examine the association between SE instability and paranoid symptoms, a logistic regression model yielding odds ratios was estimated including SE instability as the independent variable and paranoid symptoms as the dependent variable. As mentioned earlier, the dependent variable was dichotomously defined as the presence or absence of paranoid symptom(s) at T_0 and/or T_1 and/or T_2 (i.e. prevalence of symptoms over the three assessments).

The following a priori selected covariates were included in the model: age (five 10-year age groups), sex, education (four levels), presence of any baseline DSM-III-R psychiatric disorder, as well as other possible confounding factors that are known to influence the risk for psychosis: childhood trauma (0, never, once or sometimes experience of emotional, physical, psychological or sexual abuse before age 16 years; 1, regular, often or very often experience of abuse), experience of discrimination (four levels), urbanicity (level of population density of area of residence; three levels), lifetime drug use (0, no drug use; 1, any drug use more than five times), single marital status, employment status (unemployed vs other) and ethnic group (white vs other). The confounding effect of depression (standard deviation) was included in the model as self-esteem is highly correlated with depression [1, 8, 44]. Since SE instability may be confounded by SE level, we also included general level of self-esteem as a covariate in the model (mean SE level across the three measure moments).

In order to examine the specificity of the association between SE instability and paranoid symptoms, we further examined whether there was an association between SE instability and other positive psychotic symptoms (excluding paranoid symptoms). The association was assessed using logistic regression analysis and was adjusted for the same covariates as mentioned before. All statistical analyses were conducted using STATA version 9.0 [45].

Risk set

The analyses were conducted in two risk sets. All individuals with no missing values on SE level or SE instability and paranoid symptoms constituted the risk set (n = 4636; 46.7% male) for examining the association between SE instability and paranoia. In a second risk set, all individuals with paranoid symptoms were excluded (n = 4581; 46.7% male). This risk set consisted of all individuals with no missing values on SE level or SE instability and other positive psychotic symptoms.

Results

Sample

The mean age of both risk sets was 41.0 years (SD = 11.8) at T_0. Paranoid symptoms were present (at least on one assessment) in fifty-one individuals (1.1%), other positive psychotic symptoms were present (at least on one assessment) in 113 individuals (2.5%).

Self-esteem, paranoia and positive psychotic symptoms

Mean SE level in the whole sample was 32.9 (SD = 3.5). Subjects with paranoid symptoms showed a mean SE level of 30.0 (SD = 5.3), which was significantly lower than subjects with other positive psychotic symptoms (excluding paranoid symptoms) (M = 31.8, SD = 4.5) and subjects with no positive psychotic symptoms at all (M = 33.0, SD = 3.4) (F = 24.73, df = 2,4633, $P < 0.000$).

Logistic regression analyses revealed that SE instability was significantly associated with the presence of paranoid symptoms (OR = 1.37; 95% CI 1.22–1.54). The association remained significant after adjustment for SE level and the remaining above mentioned confounders (OR = 1.27; 95% CI 1.12–1.45). A significant association was found between SE instability and positive psychotic symptoms in general (excluding paranoid symptoms) at T_1, T_2 and T_3 (OR = 1.17; 95% CI 1.05–1.31). However, the association lost significance after adjustment for SE level and the other above mentioned confounders (OR = 1.09; 95% CI 0.96–1.23).

Discussion

The findings indicate that SE instability is specifically associated with paranoid symptoms and not with positive psychotic symptoms in general. These results are in line with previous research suggesting that self-esteem is important in the onset and maintenance of paranoid ideation [5, 6, 13]. The current data suggest that, besides SE level, SE instability is also important in relation to paranoid delusions. The unstable nature of self-esteem may be a plausible explanation for the inconsistent findings of the relationship between SE level and paranoia mentioned earlier. The present findings also show that individuals with paranoid symptoms have a significantly lower mean SE level than individuals with other positive psychotic symptoms. These results are compatible with the findings from Kernis and Waschull [46] showing that more unstable self-esteem is associated with a small reduction in general level of self-esteem.

The present results provide support for a recent psychological model of paranoia [5], which describes the development of persecutory delusions as a dynamic process in which abnormal beliefs about the self interact with an abnormal attributional style. Patients with persecutory delusions are characterised by an abnormal attributional style in which they make 'external, global and stable' attributions for negative events (i.e. they judge the cause of those events to be external to themselves, affecting all areas of their lives and beyond their control) and excessively internal attributions for positive events [5, 23–27]. The assumed causes of negative events involve the deliberate actions and intentions of other people rather than situational factors. The avoidance of internal attributions for negative events is believed to reflect attempts to maintain positive beliefs about the self despite implicit negative self-schemas. Persecutory delusions are therefore suggested to serve a defensive function by blaming others for negative events and thereby avoiding the experience of low self-esteem [5,

13, 47], although this remains controversial [6]. According to this defence account of paranoia, covert self-esteem will be lower than overt self-esteem in paranoid individuals.

The efforts to regulate overt self-esteem, however, are not always self-serving. Circumstantial factors may affect the specific attributions generated at any point in time. For example, attributions may temporarily be more pessimistic under circumstances in which underlying negative self-schemas are activated. In a recent experiment, Bentall and Kaney [48] observed an internalising shift for negative events in paranoid patients following a contrived failure experience. According to the theory, one consequence of these dysfunctional efforts are fluctuations in overt self-esteem. The findings from the present study are therefore consistent with the predictions made from the attributional model.

The results of this study should be interpreted in the light of several limitations. Firstly, self-esteem was measured at three distant points in time. One could argue that the dynamic nature of self-esteem could not sufficiently be captured by three isolated measure moments. However, if self-esteem is truly fluctuating, this should be reflected in changes over time (i.e. larger SD), yet more research is necessary to capture the nature of the instability. Ideally this research should focus on multiple assessments, which enables us to explore the temporal relationship and dynamic patterns between the concepts of interest. Secondly, SE instability was measured by means of the Rosenberg Self-Esteem Scale [2]. Originally, this scale was designed to assess global trait self-esteem. However, since it is assumed that global self-esteem might change over time and since the current study investigated subjects at distant points in time (one and two years apart), the Rosenberg Self-Esteem Scale was suitable. Indeed, changes in Rosenberg scores have been used as a measure of SE fluctuation in previous research [15]. Thirdly, the study included individuals with prevalent positive psychotic symptoms on at least one of the measure moments, because of a limited number of individuals with prevalent symptoms at all three measure moments together. However, we do not think this is a significant limitation of the study, since it is likely that underlying psychological mechanisms responsible for paranoid symptoms are associated with a liability to develop psychosis. Finally, the data of the current study do not allow inferring a causal relationship between SE instability and paranoid symptoms, but merely show an association. Instability in self-esteem can therefore be conceived as an expression of psychosis liability.

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References

1. Barrowclough C, Tarrier N, Humphreys L, Ward J, Gregg L, Andrews B (2003) Self-esteem in schizophrenia: relationships between self-evaluation, family attitudes, and symptomatology. J Abnorm Psychol 112:92–99
2. Rosenberg M (1965) Society and the adolescent self-image. Princeton University Press, Princeton, NJ
3. Guillon MS, Crocq MA, Bailey PE (2003) The relationship between self-esteem and psychiatric disorders in adolescents. Eur Psychiatry 18:59–62
4. Silverstone PH (1991) Low self-esteem in different psychiatric conditions. Br J Clin Psychol 30(2):185–188
5. Bentall RP, Corcoran R, Howard R, Blackwood N, Kinderman P (2001) Persecutory delusions: a review and theoretical integration. Clin Psychol Rev 21:1143–1192
6. Freeman D, Garety P, Fowler D, Kuipers E, Dunn G, Bebbington P, Hadley C (1998) The London-East Anglia randomized controlled trial of cognitive-behaviour therapy for psychosis. IV: Self-esteem and persecutory delusions. Br J Clin Psychol 37(4):415–430
7. Krabbendam L, Janssen I, Bak M, Bijl RV, de Graaf R, van Os J (2002) Neuroticism and low self-esteem as risk factors for psychosis. Soc Psychiatry Psychiatr Epidemiol 37:1–6
8. Drake RJ, Pickles A, Bentall RP, Kinderman P, Haddock G, Tarrier N, Lewis SW (2004) The evolution of insight, paranoia and depression during early schizophrenia. Psychol Med 34:285–292
9. Combs DR, Penn DL (2004) The role of subclinical paranoia on social perception and behavior. Schizophr Res 69:93–104
10. Ellett L, Lopes B, Chadwick P (2003) Paranoia in a nonclinical population of college students. J Nerv Ment Dis 191:425–430
11. Martin JA, Penn DL (2001) Social cognition and subclinical paranoid ideation. Br J Clin Psychol 40:261–265
12. Candido CL, Romney DM (1990) Attributional style in paranoid vs. depressed patients. Br J Med Psychol 63(4):355–363
13. Lyon HM, Kaney S, Bentall RP (1994) The defensive function of persecutory delusions. Evidence from attribution tasks. Br J Psychiatry 164:637–646
14. Kernis MH (2005) Measuring self-esteem in context: the importance of stability of self-esteem in psychological functioning. J Pers 73:1569–1605
15. Kernis MH, Cornell DP, Sun CR, Berry A, Harlow T (1993) There's more to self-esteem than whether it is high or low: the importance of stability of self-esteem. J Pers Soc Psychol 65:1190–1204
16. Kernis MH, Goldman BM (2003) Stability and variability in self-concept en self-esteem. In: Leary M, Tangney J (eds) Handbook of self and identity. The Guilford Press, New York, pp 106–152
17. Leary MR, Tangney JP (2003) Handbook of self and identity. Guilford Press, New York
18. Greenier KD, Kernis MH, McNamara CW, Waschull SB, Berry AJ, Herlocker CE, Abend TA (1999) Individual differences in reactivity to daily events: examining the roles of stability and level of self-esteem. J Pers 67:185–208
19. Kernis MH (1993) The role of stability and level of self-esteem in psychological functioning. In: Baumeister RF (eds) Self-esteem : the puzzle of low self-regard. Plenum Press, New York, pp 167–182
20. Kernis MH, Grannemann BD, Barclay LC (1989) Stability and level of self-esteem as predictors of anger arousal and hostility. J Pers Soc Psychol 56:1013–1022
21. Kernis MH, Whisenhunt CR, Waschull SB, Greenier KD, Berry AJ, Herlocker CE, Anderson CA (1998) Multiple facets of self-esteem and their relations to depressive symptoms. Personality and Social Psychology Bulletin 24:657–668
22. Paradise AW, Kernis MH (2002) Self-esteem and psychological well-being: implications of fragile self-esteem. J Soc Clin Psych 21:345–361

23. Fear C, Sharp H, Healy D (1996) Cognitive processes in delusional disorders. Br J Psychiatry 168:61–67
24. Kaney S, Bentall RP (1989) Persecutory delusions and attributional style. Br J Med Psychol 62(2):191–198
25. Kaney S, Bentall RP (1992) Persecutory delusions and the self-serving bias. Evidence from a contingency judgment task. J Nerv Ment Dis 180:773–780
26. Lee HJ, Won HT (1998) The self-concepts, the other-concepts, and attributional style in paranoia and depression. Korean J Clin Psychol 17:105–125
27. Sharp HM, Fear CF, Healy D (1997) Attributional style and delusions: an investigation based ondelusional content. Eur Psychiatry 12:1–7
28. Fenigstein A, Vanable PA (1992) Paranoia and self-consciousness. J Pers Soc Psychol 62:129–138
29. Johns LC, van Os J (2001) The continuity of psychotic experiences in the general population. Clin Psychol Rev 21:1125–1141
30. Stefanis NC, Hanssen M, Smirnis NK, Avramopoulos DA, Evdokimidis IK, Stefanis CN, Verdoux H, Van Os J (2002) Evidence that three dimensions of psychosis have a distribution in the general population. Psychol Med 32:347–358
31. Verdoux H, van Os J (2002) Psychotic symptoms in non-clinical populations and the continuum of psychosis. Schizophr Res 54:59–65
32. Bak M, Myin-Germeys I, Hanssen M, Bijl R, Vollebergh W, Delespaul P, van Os J (2003) When does experience of psychosis result in a need for care? A prospective general population study. Schizophr Bull 29:349–358
33. Krabbendam L, Myin-Germeys I, Hanssen M, Bijl RV, de Graaf R, Vollebergh W, Bak M, van Os J (2004) Hallucinatory experiences and onset of psychotic disorder: evidence that the risk is mediated by delusion formation. Acta Psychiatr Scand 110:264–272
34. Bijl RV, Ravelli A, van Zessen G (1998) Prevalence of psychiatric disorder in the general population: results of The Netherlands Mental Health Survey and Incidence Study (NEMESIS). Soc Psychiatry Psychiatr Epidemiol 33:587–595
35. Bijl RV, van Zessen G, Ravelli A, de Rijk C, Langendoen Y (1998) The Netherlands Mental Health Survey and Incidence Study (NEMESIS): objectives and design. Soc Psychiatry Psychiatr Epidemiol 33:581–586
36. Smeets RMW, Dingemans PMAJ (1993) Composite International Diagnostic Interview (CIDI) Version 1.1. World Health Organisation, Geneva, Switzerland
37. WHO (1990) Composite International Diagnostic Interview (CIDI) Version 1.0. World Health Organisation, Geneva: Switzerland
38. Wittchen HU, Robins LN, Cottler LB, Sartorius N, Burke JD, Regier D (1991) Cross-cultural feasibility, reliability and sources of variance of the Composite International Diagnostic Interview (CIDI). The Multicentre WHO/ADAMHA Field Trials. Br J Psychiatry 159:645–653, 658
39. Semler G, von Cranach M, Wittchen HU (1987) Comparison between the Composite International Diagnostic Interview and the Present State Examination: Report to the WHO/ADAMHA Task Force on Instrument Development. In: World Health Organization, Geneva, Switzerland
40. Wacker HR, Battegay R, Mullejans R, Schlosser C (1990) Using the CIDI in the general population. In: Stefanis CN, Rabavilas AD, Soldatos CR (eds) Psychiatry : a world perspective. Elsevier Science Publishers, Amsterdam, pp 138–143
41. Blascovich J, Tomaka J (1991) Measures of self-esteem. In: Robinson JP, Shaver PR, Wrightsman LS, Andrews FM (eds) Measures of personality and social psychological attitudes. Academic Press, San Diego
42. Helbing JC (1982) Zelfwaardering: Meting en validiteit. Ned Tijdschr Psychol 37:257–277
43. Schmitt DP, Allik J (2005) Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: exploring the universal and culture-specific features of global self-esteem. J Pers Soc Psychol 89:623–642
44. Rosenberg M, Schoenbach C, Schooler C, Rosenberg F (1995) Global self-esteem and specific self-esteem: Different concepts, different outcomes. Am Sociol Rev 60:141–156
45. StataCorp (2005) Stata Statistical Software: Release 9.0. Stata Corporation, College Station, TX
46. Kernis MH, Waschull SB (1995) The interactive roles of stability and level of self-esteem: Research and theory. In: Zanna MP (eds) Advances in experimental social psychology. Academic Press, San Diego, pp 93–141
47. Kinderman P, Kaney S, Morley S, Bentall RP (1992) Paranoia and the defensive attributional style: deluded and depressed patients' attributions about their own attributions. Br J Med Psychol 65(4):371–383
48. Bentall RP, Kaney S (2005) Attributional lability in depression and paranoia. Br J Clin Psychol 44:475–488

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